ABSTRACT

The present invention relates to a novel process for the preparation of biologically active antibody dimers in a pharmaceutically acceptable composition. The dimers can be composed of two antibody molecules having the same antigen binding specificity and linked through a reducible, disulfide, or a non-reducible thioether, bond (homodimer). Alternatively, the dimers can be composed of two different antibody molecules having binding specificity for two distinct antigens (heterodimer). These dimers are useful for inducing hyper-cross-linking of membrane antigens. The present invention further relates to the use of biologically active antibody dimers for the preferential killing or inhibition of selected cell populations in the treatment of diseases such as cancer and autoimmune disorders.